

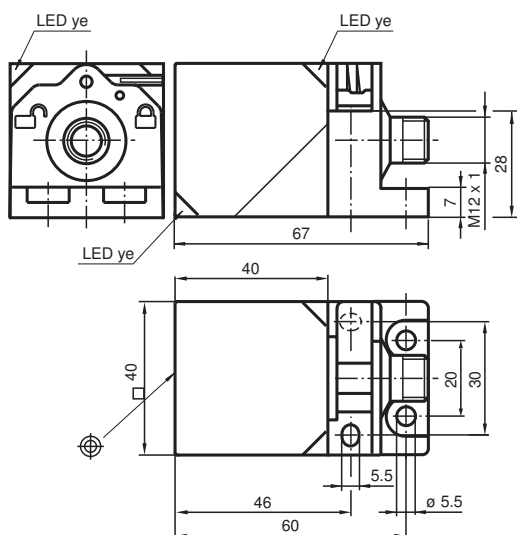


Inductive sensor NCB20-L2-N0-V1

- Sensor head bidirectional and rotatable
- 20 mm flush
- Quick mounting bracket
- Usable up to SIL 2 acc. to IEC 61508



Dimensions



Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	20 mm
Installation		flush
Assured operating distance	s_a	0 ... 16.2 mm
Actual operating distance	s_r	18 ... 22 mm
Reduction factor r_{AI}		0.33
Reduction factor r_{Cu}		0.31
Reduction factor r_{304}		0.74

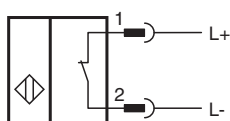
Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 300 Hz

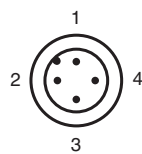
Technical Data

Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Current consumption		
Measuring plate not detected		$\geq 2.2 \text{ mA}$
Measuring plate detected		$\leq 1 \text{ mA}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1660 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
Approvals and certificates		
EAC conformity		TR CU 012/2011
Protection class		II
Rated insulation voltage	U _i	253 V
Rated impulse withstand voltage	U _{imp}	4000 V
UL approval		
Ordinary Location		E87056
Hazardous Location		E501628
Control drawing		116-0451
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1, 4-pin
Housing material		PA
Sensing face		PA
Degree of protection		IP66 / IP69K
Mass		130 g
Equipment protection level Dc (tc)		
Special conditions		
Maximum permissible ambient temperature T _{Umax}		Values can be obtained from the following list, depending on the max. operating voltage U _{Bmax} and the minimum series resistance R _v .
General information		
Use in the hazardous area		see instruction manuals

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-6

1		BN	(brown)
2		BU	(blue)

Accessories

	V1-G-N-2M-PUR	Female cordset, M12, 2-pin, NAMUR, PUR cable
	V1-W-N-2M-PUR	Female cordset, M12, 2-pin, NAMUR, PUR cable
	MHW 01	Modular mounting bracket

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